

CLAIMS

1. A method of providing information, comprising:
receiving an information signal;
providing an LED illumination device wherein the illumination device further
5 comprises an input connection;
providing a processor for converting the information signal into an illumination
control signal; and
communicating the illumination control signal to the input connection wherein
the illumination device changes color corresponding to the information signal.
10
2. A package indicator comprising:
at least one LED:
a controller for generating and communicating control signals to the at least one
LED wherein the controller is associated with a program input for receiving signals
15 indicative of environmental conditions; and
at least one of a sensor, transducer, timer, receiver, signal generator, wherein the
at least one of a sensor, transducer, timer, receiver, signal generator communicates
signals to the program input.
- 20 3. A package indicator comprising:
two or more LEDs:
a controller for generating and communicating control signals to the two or more
LEDs wherein the controller is associated with a program input for receiving signals
indicative of environmental conditions; and
25 at least one of a sensor, transducer, timer, receiver, signal generator, wherein the
at least one of a sensor, transducer, timer, receiver, signal generator communicates
signals to the program input.
4. A system for indicating a condition of an item, comprising:
30 an illumination system for providing illumination suitable for conveying
information and capable of receiving input from an information system; and
an information system for providing input to the illumination system;

wherein the information system provides information about the item and the illumination system is controlled to provide illumination that indicates the information.

5. A system of claim 4, wherein the item is a package and the illumination system indicates information about the condition of the package.
6. A system of claim 4, wherein the item is a container and the illumination indicates information about the container.
7. A method of claim 6, wherein the item is a container for an item selected from the group consisting of a body part, an organ, a tissue, blood, plasma, a liquid, an organic liquid, clothing, a food, apparel, a battery-operated item, a computer, a phone, a beverage, a beer, a soft drink, a wine, an alcoholic beverage, a perishable item, a fruit, a vegetable, a meat, a dry good, a cereal, a grain, a tobacco, an animal, and a plant.
8. A system of claim 4, wherein the condition is selected from the group consisting of age, elapsed time, exposure to temperatures, exposure to radiation, exposure to a microbe, exposure to a bacterium, exposure to a virus, exposure to heat, exposure to cold, exposure to moisture, exposure to pressure, exposure to acceleration, exposure to forces, exposure to vibration, exposure to light, exposure to shock, exposure to electricity, exposure to sound, exposure to humidity, and exposure to magnetism.
9. A system of claim 8, wherein the illumination system controls lighting elements by pulse width modulation.
10. A system of claim 4, wherein the illumination system indicates exposure of a package for a perishable item to an environmental condition.
11. A system of claim 11, wherein the environmental condition is heat.
12. A system of claim 11, wherein the environmental condition is passage of an amount of time in excess of a selected amount of time.
13. A system of claim 4, wherein the illumination system gradually changes to a selected color with the passage of time.

14. A system of claim 13, wherein the illumination system changes to red with passage of time.

15. A system of claim 4, wherein the illumination system changes illumination to indicate exposure to temperatures that exceed a predetermined acceptable range.

5 16. A system of claim 4, wherein the information system tracks a plurality of environmental conditions and the illumination system illuminates the item to reflect the different environmental conditions.

17. A system of claim 4, further comprising a sensor for receiving signals to supply the information system with information.

10 18. A system of claim 4, further comprising providing a transmitter for transmitting information from the information system about the item.

19. A system of claim 4, wherein the information system obtains information about shipping events and wherein the illumination system indicates information about shipping events.

15 20. A system of claim 4, wherein the illumination system provides illumination for reflecting information useful for maintaining inventory in a facility.

21. A system of claim 4, wherein the information system stores first information for controlling illumination prior to an item being displayed for retail purposes and second information for controlling illumination when the item is being displayed for retail
20 purposes.

22. A system of claim 21, wherein the first information controls illumination to indicate shipping information of an item and the second information controls illumination to provide an aesthetic feature for the item.

23. A method of providing an indicator for a package, comprising:
25 providing at least one LED:
providing a controller for generating and communicating control signals to the at least one LED wherein the controller is associated with a program input for receiving signals indicative of environmental conditions; and

providing at least one of a sensor, transducer, timer, receiver, signal generator,
wherein the at least one of a sensor, transducer, timer, receiver, signal generator
communicates signals to the program input.

5 24. A method of providing a package indicator comprising:

providing two or more LEDs:

providing a controller for generating and communicating control signals to the
two or more LEDs wherein the controller is associated with a program input for
receiving signals indicative of environmental conditions; and

10 providing at least one of a sensor, transducer, timer, receiver, signal generator,
wherein the at least one of a sensor, transducer, timer, receiver, and signal generator that
communicates signals to the program input.

25. A method of providing a light-based indicator system for indicating a condition
15 of an item, comprising:

providing an illumination system for providing illumination suitable for
conveying information and capable of receiving input from an information system; and

providing an information system for providing input to the illumination system;
wherein the information system provides information about the item and the
20 illumination system is controlled to provide illumination that indicates the information.

26. A method of claim 25, wherein the item is a package and the illumination system
indicates information about the condition of the package.

25 27. A method of claim 25, wherein the item is a container and the illumination
indicates information about the container.

28. A method of claim 27, wherein the item is a container for an item selected from
the group consisting of a body part, an organ, a tissue, blood, plasma, a liquid, an organic
30 liquid, clothing, a food, apparel, a battery-operated item, a computer, a phone, a
beverage, a beer, a soft drink, a wine, an alcoholic beverage, a perishable item, a fruit, a
vegetable, a meat, a dry good, a cereal, a grain, a tobacco, an animal, and a plant.

29. A method of claim 25, wherein the condition is selected from the group consisting of age, elapsed time, exposure to temperatures, exposure to radiation, exposure to a microbe, exposure to a bacterium, exposure to a virus, exposure to heat, exposure to cold, exposure to moisture, exposure to pressure, exposure to acceleration, exposure to forces, exposure to vibration, exposure to light, exposure to shock, exposure to electricity, exposure to sound, exposure to humidity, and exposure to magnetism.
30. A method of claim 29, wherein the illumination system controls lighting elements by pulse width modulation.
31. A method of claim 25, wherein the illumination system indicates exposure of a package for a perishable item to an environmental condition.
32. A method of claim 31, wherein the environmental condition is heat.
33. A method of claim 31, wherein the environmental condition is passage of an amount of time in excess of a selected amount of time.
34. A method of claim 25, wherein the illumination system gradually changes to a selected color with the passage of time.
35. A method of claim 34, wherein the illumination system changes to red with passage of time.
36. A method of claim 25, wherein the illumination system changes illumination to indicate exposure to temperatures that exceed a predetermined acceptable range.
37. A method of claim 25, wherein the information system tracks a plurality of environmental conditions and the illumination system illuminates the item to reflect the different environmental conditions.
38. A method of claim 25, further comprising providing a sensor for receiving signals to supply the information system with information.
39. A method of claim 25, further comprising providing a transmitter for transmitting information from the information system about the item.

40. A method of claim 25, wherein the information system obtains information about shipping events and wherein the illumination system indicates information about shipping events.
41. A method of claim 25, wherein the illumination system provides illumination for reflecting information useful for maintaining inventory in a facility.
42. A method of claim 25, wherein the information system stores first information for controlling illumination prior to an item being displayed for retail purposes and second information for controlling illumination when the item is being displayed for retail purposes.
43. A method of claim 42, wherein the first information controls illumination to indicate shipping information of an item and the second information controls illumination to provide an aesthetic feature for the item.